

REMARKS/ARGUMENTS

After the foregoing Amendment, claims 1, 2, 5, 11-52 are currently pending in this application. Claims 1, 2, 5, 11-13, 15, 19, 21-26 and 28 have been amended to more distinctly claim subject matter which the Applicants regard as the invention. New claims 34-52 have been added which include subject matter deemed allowable by the Examiner. The Applicants submit that no new matter has been introduced into the application by these amendments.

Double Patenting Rejection

Claims 21-33 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 6-11 of U.S. Patent No. 6,909,901. Although the independent claims 21 and 28 have been amended to include a limitation whereby a base station does not send a request to begin channel quality measurements to a second subset of a plurality of user equipment mobile terminals (UEs) that do not have pending downlink transmissions, the new claims 34-52 do not recite this feature. Thus, a Terminal Disclaimer is submitted herewith to overcome a potential nonstatutory obviousness-type double patenting rejection based on the new claims 34-52. The withdrawal of the nonstatutory obviousness-type double patenting rejection is respectfully requested.

Allowable Subject Matter

The Examiner is thanked for indicating that claims 5, 17, 18, 23, 29 and 30 contain allowable subject matter.

New claim 34 consists of the limitations of the previously submitted claims 1, 2 and 5 included in the Reply filed on December 16, 2005. Since the Examiner indicated that claim 5 would be allowable if rewritten in independent form

including all of the limitations of the base claim 1 and the intervening claim 2, the Applicants submit that new claim 34 and its dependent claims 35-38 are allowable over the prior art of record.

New claim 39 consists of the limitations of the previously submitted claims 15-17 included in the Reply filed on December 16, 2005. Since the Examiner indicated that claim 17 would be allowable if rewritten in independent form including all of the limitations of the base claim 15 and the intervening claim 16, the Applicants submit that new claim 39 and its dependent claims 40-42 are allowable over the prior art of record.

New claim 43 consists of the limitations of the previously submitted claims 21-23 included in the Reply filed on December 16, 2005. Since the Examiner indicated that claim 23 would be allowable if rewritten in independent form including all of the limitations of the base claim 21 and the intervening claim 22, the Applicants submit that new claim 43 and its dependent claims 44-47 are allowable over the prior art of record.

New claim 48 consists of the limitations of the previously submitted claims 28 and 29 included in the Reply filed on December 16, 2005. Since the Examiner indicated that claim 29 would be allowable if rewritten in independent form including all of the limitations of the base claim 28, the Applicants submit that new claim 48 and its dependent claims 49-52 are allowable over the prior art of record.

Claim Rejections - 35 USC §103(a)

Claims 1, 2, 11-16, 19-22, 24-28 and 31-33 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Ward et al. (U.S. Patent No. 5,701,294) in view of Budka et al. (U.S. Patent No. 6,330,288) and Olofsson et al. (U.S. Patent No. 6,167,031).

The independent claims 1, 15, 21 and 28 have been amended to more distinctly claim subject matter which the Applicants regard as the invention. In the Examiner's claim rejection, no mention of a subset of user equipment mobile terminals (UEs) that have pending downlink transmissions could be found, although it was recited in the independent claims. The Applicants note that the Examiner's rejection is confusing because it appears that the Examiner is only using the Ward reference to cover the features of the independent claims, and yet the Examiner combines the teachings of Ward with Budka and Olofsson under 35 U.S.C. 103(a) to reject the independent claims. For example, the Examiner indicates that Ward does not disclose the features of a communication signal that indicates a particular coding rate, modulation rate and modulation rate. However, these features were recited only in the dependent claims.

Ward discloses a system and method for flexible coding, modulation and time slot allocation in a radio telecommunications network. However, as now recited in the amended claims, Ward fails to disclose minimizing overhead signaling and optimizing radio resource utilization by restricting the transmission of channel quality measurement requests to only those UEs that have pending downlink transmissions so as to avoid unnecessary channel quality measurements performed by the UEs and also avoid unnecessary channel quality measurement requests transmitted by the base station. Furthermore, neither of Budka and Olofsson disclose these features.

In accordance with the present invention, a wireless communication system includes a plurality of user equipment mobile terminals (UEs) and a base station, wherein a first subset of the UEs have pending downlink transmissions and a second subset of the UEs do not have pending downlink transmissions. Each of the UEs in the first subset receive from the base station a request to begin channel

quality measurements. The base station does not transmit a request to begin channel quality measurements to the UEs in the second subset due to not having pending downlink transmissions. Each of the UEs in the first subset perform channel quality measurements and transmit to the base station the results of the channel quality measurements. The UEs in the second subset do not perform channel quality measurements because they did not receive a request to begin channel quality measurements from the base station due to not having pending downlink transmissions. The base station allocates radio resources used by the UEs in the first subset in response to the results of the channel quality measurements transmitted to the base station by the UEs in the first subset.

The Applicants submit that neither of Ward, Budka and Olofsson teach or suggest, alone or in combination, the features recited in the amended claims 1, 15, 21 and 28, or their corresponding dependent claims 2, 5, 11-14, 16-20, 22-27 and 29-33.

Based on the arguments presented above, the withdrawal of the rejection under 35 U.S.C. 103(a) is respectfully requested.

Applicant: Terry et al.
Application No.: 10/768,223

Conclusion

If the Examiner believes that any additional minor formal matters need to be addressed in order to place this application in condition for allowance, or that a telephone interview will help to materially advance the prosecution of this application, the Examiner is invited to contact the undersigned by telephone at the Examiner's convenience.

In view of the foregoing amendment and remarks, Applicants respectfully submit that the present application, including claims 1, 2, 5 and 11-52, is in condition for allowance and a notice to that effect is respectfully requested.

Respectfully submitted,

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Enclosure